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EXAMINER	
PEREZ, JULIO R	

ART UNIT	PAPER NUMBER
2681	7

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/874,089	ZHANG ET AL.	
	Examiner	Art Unit	
	Julio R Perez	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-23 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-23 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 6+5
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 5-9, 11-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Serbetciouglu et al. (5719918).

Regarding claim 1, Serbetciouglu et al. teach a short message service gateway, comprising: a short message interfacing device for receiving/sending short messages from/to outside of the short message service gateway (col. 3, lines 15-20, the network comprises mean for transmitting and receiving and interface means for exchanging short messages between terminal means); a short message service engine, in response to a request for information service included in a short message received by the short message interfacing device, for requesting the information service from at least one application server and receiving result of the information service, and then sending the result of the information service back to the short message interfacing device in a form of short message (col. 3, lines 14-30, the network possesses a transaction handling system capable of handling information services form one or more sources and converting such information into a message compatible with the terminal means for transmission, as well, on the telephone network using short messages form).

Regarding claim 2, Serbetciouglu et al. teach the short message service gateway, characterized in that the short message interfacing device is a short message daemon communicating with at least one short message apparatus (col. 5, lines 45-56, text messages are input from, for instance, terminal 210 via an air or wire interface to a SMSC, which, in turn, formats the message, as TCAP, for example; thereafter, the message is switched by a Mobile Switched Center to a Base Station Controller, and the air interface then to a Mobile Terminal).

Regarding claim 3, Serbetciouglu et al. teach the short message service gateway, characterized in that the short message interfacing device is a short message center interface communicating with at least one short message center (col. 5, lines 45-48, - 62-65, a terminal interfaces to a SMSC).

Regarding claim 5, Serbetciouglu et al. teach the short message service gateway, characterized by further comprising: a user-administrating device, for administrating a plurality of users based on a user profile (col. 6, lines 7-13, the MSC includes a home location register (HLR), which, inherently, is a database used for storage and management of subscriptions, subscribers or users. It stores permanent data about subscribers, including a subscriber's service profile and activity status).

Regarding claim 6, Serbetciouglu et al. teach the short message service gateway, characterized by further comprising: an apparatus administrating device, for administrating a plurality types of mobile telephones based on an apparatus profile (col. 6, lines 7-13, the MSC is the central component of the Network Subsystem, which inherently acts like a normal switching node of the PSTN or ISDN, and therefore,

provides all the functionality needed to handle a mobile subscriber, such as authentication, registration, handovers, and call routing).

Regarding claim 7, Serbetciouglu et al. teach the short message service gateway, characterized by further comprising: an application-administrating device, for administrating a plurality of application servers based on an application profile (col. 8, lines 29-32, the Transaction Handling System performs intelligent data assessment and reformatting in order to permit terminals to acquire application services from application servers, such as Other Application 320).

Regarding claim 8, Serbetciouglu et al. teach the short message service gateway, characterized in that the short message service engine, based on items of information service for which a user has subscribed, requests the information service from at least one application server and receives the result of the information service, and then sends the result of the information service back to the short message interfacing device in a form of short message (col. 8, lines 38-50, the transaction handling system communicates with the SMSC through the Agent terminal interface 308, the mobile terminal sends data to the THS 312 through Base Controller and MSC 302, that is, the Agent terminal communicates the information to THS. The messages transmitted or received are in a form of short message).

Regarding claim 9, Serbetciouglu et al. teach a system of providing information service for mobile telephones, comprising: at least one application server, for receiving requests for information service, and providing results of the information service (col. 6, lines 52-63 – col. 8, lines 38-50, readings are performed from terminal 324, for example,

or whenever they are requested, and sent to THS 312); at least one short message center, for forwarding short messages from/to the mobile telephones (col. 8, lines 39-50, the mobile terminal sends data to the SMSC in short messages); characterized by further comprising: a short message service gateway, comprising: a short message center interface for receiving /sending short messages from/to at least one short message center (col. 8, lines 66-67 –9, lines 1-5, the THS uses direct air interface to Mobile Terminal 322, telemetry terminal 324, dispatch terminal 326, or other terminal 328. The SMSC can route short messages to and from THS); and a short message service engine, in response to a request for information service included in a short message received by the short message center interface, for requesting the information service from said at least one application server and receiving result of the information service, and then sending the result of the information service back to the short message center interface in a form of short message (col. 3, lines 14-24, the system functions in a cellular telephone network, wherein channels carry Short Messages, and, which includes means for transmitting and receiving messages, Short Messages, on said signaling channels, it also supports means for exchanging Short messages between terminals, and a transaction Handling system for receiving information from different sources and sending a message compatible with those of the terminal means using Short Messages).

Regarding claim 11, Serbetciouglu et al. teach the system, characterized in that the short message service gateway further comprises: a user administrating device, for administrating a plurality of users based on a user profile (col. 6, lines 7-13, the MSC

includes a home location register (HLR), which, inherently, is a database used for storage and management of subscriptions, subscribers or users. The HLR stores permanent data about subscribers, including a subscriber's service profile and activity status).

Regarding claim 12, Serbetciouglu et al. teach the system, characterized in that the short message service gateway further comprises: an apparatus administrating device, for administrating a plurality types of mobile telephones based on an apparatus profile (col. 6, lines 7-13, the MSC is the central component of the Network Subsystem, which inherently acts like a normal switching node of the PSTN or ISDN, and therefore, provides all the functionality needed to handle a mobile subscriber, such as authentication, registration, handovers, and call routing).

Regarding claim 13, Serbetciouglu et al. teach the system, characterized in that the short message service gateway further comprises: an application administrating device, for administrating a plurality of application servers based on an application profile (col. 8, lines 29-32, the Transaction Handling System performs intelligent data assessment and reformatting in order to permit terminals to acquire application services from application servers, such as Other Application 320).

Regarding claim 14, Serbetciouglu et al. teach the system, characterized in that the short message service engine, based on items of information service for which a user has subscribed, requests the information service from said at least one application server (110) and receives the result of the information service, and then sends the result of the information service back to the short message center interface in a form of short

message (col. 8, lines 38-50, the transaction handling system communicates with the SMSC through the Agent terminal interface 308, the mobile terminal sends data to the THS 312 through Base Controller and MSC 302, that is, the Agent terminal communicates the information to THS. The messages transmitted or received are in a form of short message).

Regarding claim 15, Serbetciouglu et al. teach a system of providing information service for mobile telephones, comprising: at least one application server, for receiving requests for information service, and providing results of the information service (col. 6, lines 52-63 – col. 6, lines 38-50, readings are performed from terminal 324, for example, or whenever they are requested, and sent to THS 312); at least one short message apparatus, for forwarding short messages from/to the mobile telephones (col. 3, lines 13-20 –col. 8, lines 24-28, the network includes terminal means for transmitting and receiving short messages between terminals); characterized by further comprising: a short message service gateway comprising: a short message daemon, for receiving/sending short messages from/to said at least one short message apparatus (col. 8, lines 39-50, short messages can be transmitted or received by the SMSC or transmitted or received by the mobile terminal); and a short message service engine, in response to a request for information service included in a short message received by the short message daemon, for requesting the information service from said at least one application server and receiving result of the information service, and then sending the result of the information service back to the short message daemon in a form of short

message (col. 3, lines 14-24, the THS serves as an application server for requesting or receiving requests for applications).

Regarding claim 16, Serbetciouglu et al. teach the system, characterized in that the short message service gateway further comprises: user-administrating device, for administrating a plurality of users based on a user profile (col. 6, lines 7-13, the MSC includes a home location register (HLR), which, indeed, is a database used for storage and management of subscriptions, subscribers or users. It stores permanent data about subscribers, including a subscriber's service profile and activity status).

Regarding claim 17, Serbetciouglu et al. teach the system, characterized in that the short message service gateway further comprises: an apparatus administrating device, for administrating a plurality types of mobile telephones based on an apparatus profile (col. 6, lines 7-13, the MSC is the central component of the Network Subsystem, which acts like a normal switching node of the PSTN or ISDN, and therefore, provides all the functionality needed to handle a mobile subscriber, such as authentication, registration, handovers, and call routing).

Regarding claim 18, Serbetciouglu et al. teach the system, characterized in that the short message service gateway further comprises: an application administrating device, for administrating a plurality of application servers based on an application profile (col. 8, lines 29-31, the Transaction Handling System performs intelligent data assessment and reformatting in order to permit terminals to acquire application services from application servers, such as Other Application 320).

Regarding claim 19, Serbetciouglu et al. teach the system, characterized in that the short message service engine, based on items of information service for which a user has subscribed, requests the information service from said at least one application server and receives the result of the information service, and then sends the result of the information service back to the short message daemon in a form of short message (col. 8, lines 38-50, the transaction handling system communicates with the SMSC through the Agent terminal interface 308, the mobile terminal sends data to the THS 312 through Base Controller and MSC 302, that is, the Agent terminal communicates the information to THS. The messages transmitted or received are in a form of short message).

Regarding claim 20, Serbetciouglu et al. teach a method of providing information service for mobile telephones, characterized by comprising steps of: a) receiving a short message from a mobile telephone (col. 3, lines 13-24, the network possesses interface means for exchanging Short Messages between terminals; b) extracting an information service code from the short message (col. 3, lines 24-30, a unique identifier is generated for providing encoded information); c) based on the information service code, retrieving results of the information service from at least one application server (col. 3, lines 62-67 – col. 9, lines 1-2, the THS includes means for encrypting the encoded information before is formed into a short message); and d) combining the results of the information service into a short message and sending the short message to the mobile telephone (col. 3, lines 50-61, the short message is sent to the POS or mobile terminal via the cellular network).

Regarding claims 21 and 22, Serbetciouglu et al. teach the method, characterized in that said steps a) and d) are performed by way of short message apparatus (col. 3, lines 14-20, the mobile terminals are capable of receiving or transmitting short messages).

Regarding claim 23, Serbetciouglu et al. teach the method, characterized by further comprising a step of obtaining the information service code based on items of the information service for which a use has subscribed, without performing said steps a) and b) (col. 3, lines 31-37).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Serbetciouglu et al. (5719918) in view of Lorello et al. (6459904).

Regarding claims 4 and 10, Serbetciouglu et al. teach all the limitations in claims 1 and 9.

Serbetciouglu et al. do not explicitly disclose a short message center-administrating device, for administrating a plurality of short message centers based on a short message center profile.

However, the preceding limitation is known in the art of telecommunications. Lorello et al. teach a system that includes two or more SMSCs servicing a particular subscriber (104). The SMSC (120), for instance, further includes a controller (126) that

controls the communications between the SMSC (120) and the rest of the network via the interfaces (121) and (122), the storage retrieval of short messages (col. 9, lines 3-8, 17-23, 33-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the Short Message Transaction System as taught by Serbetciouglu et al. by implementing the system with a controller as taught by Lorello et al. because it would provide Serbetciouglu et al. with the capability of controlling or administrating short message centers.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R Perez whose telephone number is (703) 305-8637. The examiner can normally be reached on Monday - Friday, 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh N Tran can be reached on (703) 305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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2/20/04

SINH TRAN
PRIMARY EXAMINER